UNIT TERMINAL OBJECTIVE

At the completion of this unit, the EMT-Intermediate student will be able to integrate the principles of history taking and techniques of physical exam to perform patient assessment on an emergency patient.

COGNITIVE OBJECTIVES

At the completion of this unit, the EMT-Intermediate student will be able to:

3-3.1 Recognize hazards/potential hazards. (C-1)
3-3.2 Describe common hazards found at the scene of a trauma and a medical patient. (C-1)
3-3.3 Determine hazards found at the scene of a medical or trauma patient. (C-2)
3-3.4 Differentiate safe from unsafe scenes. (C-3)
3-3.5 Describe methods to making an unsafe scene safe. (C-1)
3-3.6 Discuss common mechanisms of injury/nature of illness. (C-1)
3-3.7 Recognize the importance of determining the mechanism of injury. (C-2)
3-3.8 Discuss the reason for identifying the total number of patients at the scene. (C-1)
3-3.9 Organize the management of a scene following size-up. (C-3)
3-3.10 Explain the reasons for identifying the need for additional help or assistance. (C-1)
3-3.11 Summarize the reasons for forming a general impression of the patient. (C-1)
3-3.12 Discuss methods of assessing mental status. (C-1)
3-3.13 Categorize levels of consciousness. (C-3)
3-3.14 Discuss methods of assessing the airway. (C-1)
3-3.15 Describe why the cervical spine is immobilized during the assessment of the trauma patient. (C-1)
3-3.16 Analyze a scene to determine if spinal precautions are required. (C-3)
3-3.17 Describe methods used for assessing if a patient is breathing. (C-1)
3-3.18 Differentiate between a patient with adequate and inadequate minute ventilation. (C-3)
3-3.19 Discuss the need for assessing the patient for external bleeding. (C-1)
3-3.20 Describe normal and abnormal findings when assessing skin color. (C-1)
3-3.21 Describe normal and abnormal findings when assessing skin temperature. (C-1)
3-3.22 Describe normal and abnormal findings when assessing skin condition. (C-1)
3-3.23 Explain the reason for prioritizing a patient for care and transport. (C-1)
3-3.24 Identify patients who require expeditious transport. (C-3)
3-3.25 Describe orthostatic vital signs and evaluate their usefulness in assessing a patient in shock. (C-1)
3-3.26 Apply the techniques of physical examination to the medical patient. (C-1)
3-3.27 Differentiate between the assessment that is performed for a patient who is has an altered mental status and other medical patients. (C-3)
3-3.28 Discuss the reasons for reconsidering the mechanism of injury. (C-1)
3-3.29 State the reasons for performing a rapid trauma assessment. (C-1)
3-3.30 Recite examples and explain why patients should receive a rapid trauma assessment. (C-1)
3-3.31 Apply the techniques of physical examination to the trauma patient. (C-1)
3-3.32 Describe the areas included in the rapid trauma assessment and discuss what should be evaluated. (C-1)
3-3.33 Differentiate cases when the rapid assessment may be altered in order to provide patient care. (C-3)
3-3.34 Discuss the reason for performing a focused history and physical exam. (C-1)
3-3.35 Describe when and why a detailed physical examination is necessary. (C-1)
3-3.36 Discuss the components of the detailed physical exam in relation to the techniques of examination. (C-1)
3-3.37 State the areas of the body that are evaluated during the detailed physical exam. (C-1)
3-3.38 Explain what additional care should be provided while performing the detailed physical exam. (C-1)
3-3.39 Distinguish between the detailed physical exam that is performed on a trauma patient and that of the medical patient. (C-3)
3-3.40 Differentiate between patients requiring a detailed physical exam from those who do not. (C-3)
3-3.41 Discuss the reasons for repeating the initial assessment as part of the on-going assessment. (C-1)
3-3.42 Describe the components of the on-going assessment. (C-1)
3-3.43 Describe the trending of assessment components. (C-1)
AFFECTIVE OBJECTIVES
At the completion of this unit, the EMT-Intermediate student will be able to:

3-3.45 Explain the rationale for crew members to evaluate scene safety prior to entering. (A-2)
3-3.46 Serve as a model for others explaining how patient situations affect your evaluation of mechanism of injury or illness. (A-3)
3-3.47 Explain the importance of forming a general impression of the patient. (A-1)
3-3.48 Explain the value of performing an initial assessment. (A-2)
3-3.49 Demonstrate a caring attitude when performing an initial assessment. (A-3)
3-3.50 Attend to the feelings that patients with medical conditions might be experiencing. (A-1)
3-3.51 Value the need for maintaining a professional caring attitude when performing a focused history and physical examination. (A-3)
3-3.52 Explain the rationale for the feelings that these patients might be experiencing. (A-3)
3-3.53 Demonstrate a caring attitude when performing a detailed physical examination. (A-3)
3-3.54 Explain the value of performing an on-going assessment. (A-2)
3-3.55 Recognize and respect the feelings that patients might experience during assessment. (A-1)
3-3.56 Explain the value of trending assessment components to other health professionals who assume care of the patient. (A-2)

PSYCHOMOTOR OBJECTIVES
At the completion of this unit, the EMT-Intermediate student will be able to:

3-3.57 Demonstrate the techniques for assessing mental status. (P-2)
3-3.58 Demonstrate the techniques for assessing the airway. (P-2)
3-3.59 Demonstrate the techniques for determining if the patient is breathing. (P-2)
3-3.60 Demonstrate the techniques for determining if the patient has a pulse. (P-2)
3-3.61 Demonstrate the techniques for determining the patient for external bleeding. (P-2)
3-3.62 Demonstrate the techniques for determining the patient's skin color, temperature, and condition. (P-2)
3-3.63 Using the techniques of examination, demonstrate the assessment of a medical patient. (P-2)
3-3.64 Demonstrate the techniques for assessing a patient who is responsive with no known history. (P-2)
3-3.65 Demonstrate the techniques for assessing a patient who has an altered mental status. (P-2)
3-3.66 Perform a rapid medical assessment. (P-2)
3-3.67 Perform a focused history and physical exam of the medical patient. (P-2)
3-3.68 Using the techniques of physical examination, demonstrate the assessment of a trauma patient. (P-2)
3-3.69 Demonstrate the rapid trauma assessment used to assess a patient based on mechanism of injury. (P-2)
3-3.70 Perform a focused history and physical exam on a non-critically injured patient. (P-2)
3-3.71 Perform a focused history and physical exam on a patient with life-threatening injuries. (P-2)
3-3.72 Perform a detailed physical examination. (P-2)
3-3.73 Demonstrate the skills involved in performing the on-going assessment. (P-2)
DECLARATIVE

I. Scene size-up/ assessment
   A. Body substance isolation review
      1. Eye protection if necessary
      2. Gloves if necessary
      3. Gown if necessary
      4. Mask if necessary
   B. Scene safety
      1. Definition - an assessment to assure the well-being of the EMT-Intermediate
      2. Personal protection - is it safe to approach the patient?
         a. Crash/ rescue scenes
         b. Toxic substances - low oxygen areas
         c. Crime scenes - potential for violence
         d. Unstable surfaces - slope, ice, water
      3. Protection of the patient - environmental considerations
      4. Protection of bystanders - if necessary, help the bystander avoid becoming a patient
      5. Do not enter unsafe scenes
      6. Scenes may be dangerous even if they appear to be safe
   C. Definition - an assessment of the scene and surroundings that will provide valuable information to the EMT-Intermediate
   D. Mechanism of injury/ nature of illness
      1. Medical
         a. Nature of illness - determine from the patient, family, or bystanders why EMS was activated
         b. Determine the total number of patients
         c. If there are more patients than the responding unit can effectively handle, initiate a mass casualty plan
            (1) EMT-Intermediate is less likely to call for help if involved in patient care
            (2) Prior to contact with patients, obtain additional help: law enforcement, fire, rescue, ALS, utilities
            (3) Begin triage
      2. Trauma
         a. Mechanism of injury
            (1) determine from the patient, family, or bystanders and inspection of the scene
            (2) Immobilize the cervical spine
         b. Determine the total number of patients
         c. If there are more patients than the responding unit can effectively handle, initiate a mass casualty plan
            (1) EMT-Intermediate is less likely to call for help if involved in patient care
            (2) Prior to contact with patients, obtain additional help: law enforcement, fire, rescue, ALS, utilities
            (3) Begin triage
            (4) If the responding crew can manage the situation, consider spinal precautions and continue care

II. Initial assessment
   A. General impression of the patient
      1. Formed to determine priority of care and is based on the EMT-Intermediate's immediate assessment of the environment and the patient's chief complaint
      2. Determine if ill, i.e., medical or injured (trauma)
a. If injured, identify mechanism of injury
b. If ill, identify nature of illness

B. Assess the patient and determine if the patient has a life-threatening condition
1. If a life threatening condition is found, treat immediately
2. Assess nature of illness or mechanism of injury

C. Assess patient's mental status (maintain spinal immobilization if needed)
1. Levels of mental status (AVPU)
a. Alert
b. Responds to verbal stimuli
c. Responds to painful stimuli
d. Unresponsive - no gag or cough

D. Assess the patient's airway status
1. Patent
2. Obstructed
   a. Suction
   b. Position
   c. Airway adjuncts
   d. Invasive techniques
      (1) ET intubation
      (2) Multi-lumen airways

E. Assess the patient's breathing
1. Adequate
2. Inadequate

F. Assess the patient's circulation
1. Pulse
2. If major bleeding is present - if bleeding is present, control bleeding
3. Perfusion by evaluating skin color, temperature, capillary refill, and condition

G. Identify priority patient
1. Consider
   a. Poor general impression
   b. Altered mental status
   c. Responsive, not following commands
   d. Difficulty breathing
   e. Inadequate minute volume
   f. Shock (hypoperfusion)
   g. Complicated childbirth
   h. Chest pain with suspected cardiac origin
   i. Uncontrolled bleeding
   j. Severe pain anywhere
   k. Multiple injuries
2. Expedite transport of the patient

H. Proceed to the appropriate focused history and physical examination

III. Focused history and physical exam - medical patient
A. Responsive medical patient
1. Assess patient history
   a. Chief complaint
   b. History of present illness
      (1) Attributes of a symptom
         (a) Location
            i) Where is it
            ii) Does it radiate
(b) Quality
   i) What is it like

(c) Quantity or severity
   i) How bad is it

(d) Timing
   i) When did it start
   ii) How long does it last

(e) Setting in which it occurs
   i) Emotional response
   ii) Environmental factors

(f) Factors that make it better or worse

(g) Associated manifestations

2. Perform physical examination
   a. Utilize the techniques of physical examination to
      (1) Assess the head as necessary
      (2) Assess the neck as necessary
      (3) Assess the chest as necessary
      (4) Assess the abdomen as necessary
      (5) Assess the pelvis as necessary
      (6) Assess the extremities as necessary
      (7) Assess the posterior body as necessary

3. Assess baseline vital signs
   a. Consider orthostatic vital signs

4. Provide emergency medical care based on signs and symptoms in consultation with medical direction

B. Unresponsive medical patient
1. Perform rapid assessment
2. Utilize the techniques of patient assessment
   a. Position patient to protect airway
   b. Assess the head
   c. Assess the neck
   d. Assess the chest
   e. Assess the abdomen
   f. Assess the pelvis
   g. Assess the extremities
   h. Assess the posterior aspect of the body

3. Assess baseline vital signs

4. Obtain patient history from bystander, family, friends, and/ or medical identification devices/ services
   a. Chief complaint
   b. History of present illness
   c. Past medical history
   d. Current health status

IV. Focused history and physical exam - trauma patient
A. Re-consider mechanism of injury
1. Helps to identify priority patients
2. Helps to guide the assessment
3. Significant mechanism of injury
   a. Ejection from vehicle

United States Department of Transportation
National Highway Traffic Safety Administration
**EMT-Intermediate**: National Standard Curriculum
b. Death in same passenger compartment

c. Falls > 20 feet

d. Roll-over of vehicle

e. High speed vehicle crash

f. Vehicle-pedestrian crash

g. Motorcycle crash

h. Unresponsive or altered mental status

i. Penetrations of the head, chest, or abdomen

j. Hidden injuries

   (1) Seat belts

      (a) If buckled, may have produced injuries

      (b) If patient had seat belt on, it does not mean they do not have injuries

   (2) Airbags

      (a) May not be effective without seat belt

      (b) Patient can hit steering wheel after deflation

      (c) Lift the deployed airbag and look at the steering wheel for deformation

         i) Lift and look under the bag after the patient has been removed

         ii) Any visible deformation of the steering wheel should be regarded as an indicator of potentially serious internal injury, and appropriate action should be taken

         iii) Child safety seats

            a) Injury patterns with airbags

            b) Proper use in vehicles with airbags

4. Infant and child considerations

   a. Falls >10 feet

   b. Bicycle collision

   c. Vehicle in medium speed collision

B. Perform rapid trauma physical examination on patients with significant mechanism of injury to determine life-threatening injuries

1. In the responsive patient, symptoms should be sought before and during the trauma assessment

2. Continue spinal stabilization

3. Reconsider transport decision

4. Assess mental status

5. As you inspect and palpate, look and feel for injuries or signs of injury

6. Examination

   a. Assess the head, inspect and palpate for injuries or signs of injury

   b. Assess the neck, inspect and palpate for injuries or signs of injury

   c. Apply cervical spinal immobilization collar (CSIC)

   d. Assess the chest, inspect and palpate for injuries or signs of injury

   e. Assess the abdomen, inspect and palpate for injuries or signs of injury

   f. Assess the pelvis, inspect and palpate for injuries or signs of injury

   g. Assess all four extremities, inspect and palpate for injuries or signs of injury

   h. Roll patient with spinal precautions and assess posterior body, inspect and palpate for injuries or signs of injury

   i. Look for medical identification devices

   j. Assess baseline vital signs

   k. Assess patient history

   (1) Chief complaint
(2) History of present illness
(3) Past medical history
(4) Current health status

C. For patients with no significant mechanism of injury, e.g., cut finger
1. Perform focused history and physical exam of injuries based on the techniques of examination
2. The focused assessment is performed on the specific injury site
3. Assess baseline vital signs
4. Assess patient history
   a. Chief complaint
   b. History of present illness
   c. Past medical history
   d. Current health status

V. Detailed physical exam
A. Patient and injury specific, e.g., cut finger would not require the detailed physical exam
B. Perform a detailed physical examination on the patient to gather additional information
C. General approach
   1. Assess patient history
      a. Chief complaint
      b. History of present illness
      c. Past medical history
      d. Current health status
   2. Examine the patient systematically
   3. Place special emphasis on areas suggested by the present illness and chief complaint
   4. Keep in mind that most patients view a physical exam with apprehension and anxiety - they feel vulnerable and exposed
D. Overview of the detailed physical exam
   1. Mental status
      a. Appearance and behavior
      b. Posture and motor behavior
      c. Speech and language
      d. Mood
      e. Thought and perceptions
      f. Thought content
      g. Perceptions
      h. Insight and judgement
      i. Memory and attention
      j. Remote memory (i.e., birthdays)
      k. Recent memory (i.e., events of the day)
      l. New learning ability
   2. General survey
      a. Level of consciousness
      b. Signs of distress
      c. Apparent state of health
      d. Skin color and obvious lesions
      e. Height and build
      f. Sexual development
      g. Weight
      h. Posture, gait, and motor activity
      i. Dress, grooming and personal hygiene
      j. Odors of breath or body
k. Facial expression
3. Skin
4. Head
5. Eyes
6. Ears
7. Nose and sinuses
8. Mouth and pharynx
9. Neck
10. Thorax and lungs
11. Cardiovascular system
12. Abdomen
13. External genitalia
14. Peripheral vascular system
15. Musculoskeletal system
16. Nervous system

E. Recording examination findings
F. Assess baseline vital signs

VI. On-going assessment
A. Repeat initial assessment
   1. For a stable patient, repeat and record every 15 minutes
   2. For an unstable patient, repeat and record at a minimum every 5 minutes
   3. Reassess mental status
   4. Reassess airway
   5. Monitor breathing for rate and quality
   6. Reassess circulation
   7. Re-establish patient priorities
B. Reassess and record vital signs
C. Repeat focused assessment regarding patient complaint or injuries
D. Assess interventions
   1. Assess response to management
   2. Maintain or modify management plan